CHAPTER V

MANAGEMENT OPPORTUNITIES

This chapter is comprised of a series of Tables which list potential projects, based on the analysis completed in Chapters 3 and 4, that would promote the desired trends in the watershed. The results of discussions in previous chapters are brought to conclusion by:

1. Recommending management activities that are responsive to the issues in Chapter 2 and to the interpretation(s) in Chapters 3 and 4 between existing and desired conditions and are designed to move the system towards reference conditions;
2. Summarizing Data Gaps, information needs and limitations of this analysis;
3. Identifying monitoring and research activities that are responsive to the issues and data gaps;
4. Prioritization based on Forest and District stressors and indicators.

The potential projects listed are minimally detailed. Actual project level planning and design will be done through a NEPA process which will frequently be dependent upon further ground/field survey and analysis.

Forest WRAPPS Process:

In 1999, the Wallowa-Whitman Forest Leadership Team established a watershed restoration strategy with the overall goal to maintain or improve the baseline condition, or health of all watersheds across the forest. The watershed restoration strategy was developed to assist in prioritization of restoration needs, aide in cumulative effects analyses, and display how projects are to improve or maintain baseline conditions over time.

The Watershed Restoration and Prioritization Process (WRAPP) is based upon the concept of "stressors and indicators."

> **Stressors** are effectors that push the ecosystem to the outer limits of the Historical Range of Variability (HRV). Ecosystems with high stressor values are more likely to experience large-scale re-adjustments from catastrophic events or disturbances.
>
> **Indicators** are values that provide an indication of relative ecosystem function or health. Low indicator values are often associated with a system that is under stress.

Four stressors were selected to represent the primary effectors on watersheds. The stressors selected are fire risk, forest insect and disease, noxious weed invasion, and roads. Three indicators were selected to evaluate ecosystem heath. These are aquatic (fish habitat), vegetation (HRV and structural stage departure), and Lynx (denning and forage habitat mix). Further analysis indicated that the Meadow Creek Watershed area does not have the capability to produce the habitat features needed to support lynx and is therefore not within a Lynx Analysis Unit negating lynx as an appropriate indicator for this watershed.

The Meadow Creek Watershed Rankings for NFS lands are as follows:

Stressors	***Indicators***
Fire – Moderate	**Aquatics** – High
Insects and disease – High	**Vegetation** – Moderate
Roads – High	
Noxious weeds - High	

The Meadow Creek Watershed Rankings for Private lands are as follows*:

Stressors	*Indicators*
Fire – High	**Aquatics** – High
Insects and disease – High	**Vegetation** – High
Roads – High	
Noxious weeds - Moderate	

*Based on FY2001 Blue Mountain Demonstration Project WRAPPS

Analysis of the combined Forest Service and Private land ratings resulted in an overall priority rating of High for restoration work within the Meadow Creek Watershed.

RECOMMENDATIONS

POTENTIAL PROJECTS FOR ECOSYSTEM MANAGMENT AND RESTORATION

This section is presented in the three main dimensions (physical, human, and biological). Under each dimension, **potential projects** are organized and displayed by narrative or in a series of tables **under their related key question resource area**. These recommended projects have the objective of creating a movement or trend towards desired conditions in the watershed. This will also provide a stronger link with Watershed Assessments and District NEPA documents answering the questions:

1) How does this project fit within the identified priorities of the entire Watershed? Answers the question of "Why here, why now?".
2) How does it move the area toward the desired conditions?
3) How does this project fit within the thresholds that this watershed can withstand?

The potential projects listed vary in detail. The information from this analysis was used to guide development for Dark Meadow, McMeadow, and Burnt Pickle Restoration projects. Site specific information summaries from these analyses will be included in the attached tables and referenced appendices. Other information outside either the scope or area of those proposed projects will not be as specific in detail. Additional project level planning and design will be done through NEPA and selection will require further field survey and analysis.

Table 5-1: General – Survey and Monitoring Needs						
Number	***Project***	***Location***	***Purpose***	***Acres***	***Time Frame***	***Priority***
G-1	Stocking Surveys	Regeneration units in all subwatersheds in Wshed 86	To determine seedlings per acre and ensure adequate stocking.	2,460 currently	Within next 5 years	Low. Part of ongoing program.
G-2	Water Quality Monitoring	All SWS	Continue existing monitoring program at all gaging stations, stream temperatures sites, and precipitation sites.			Moderate
G-3	Road Surveys	All SWS	Build on existing information and culvert inventories to update ATM Plan and Roads Analysis.			Moderate-High
G-4	Stream Surveys	All SWS	Continue existing stream survey program across entire SWS			Moderate-High
G-5	PETS Surveys	All SWS	Continue existing survey program for fish, plants and wildlife Proposed, Endangered, and Threatened species.			Moderate-High

THE PHYSICAL DIMENSION

AQUATIC

Table 5-2: Aquatic Projects

Number	*Project*	*Location*	*Purpose*	*Acres*	*Time Frame*	*Priority (Hi to Low)*
P-1	Stand Initiation (SI) Creation	SWS 86A and G	Create SI structural stage (0 to 20 year old trees) to mimic the natural opening processes.	86A – treat up to 338 acres. 86G – treat up to 63 acres.	Within 5-10 years	
P-2	SI Maintenance	SWS 86B-F, H-J	Maintain 5-15% of forested acres in SI. Thin remaining SI acres to accelerate stand development and hydrologic recovery.	86B: up to 819 ac. 86C: up to 1171 ac 86D: up to 1644 ac. 86E: up to 165 ac. 86F: up to 236 ac. 86H: up to 882 ac. 86I: up to 1497 ac. 86J: up to 1985 ac.	Within 5-10 years	SWS: J,D,I, C,H,B,F,E
P-3	RHCA Planting	SWS 86A-J	Interplant understocked RHCAs in all subwatersheds to accelerate development of canopy cover, root mass, and recruitment material.	86A: 52 ac. 86B: 936 ac. 86C: 556 ac. 86D: 1,062 ac. 86E: 167 ac. 86F: 349 ac. 86G: 402 ac. 86H: 648 ac. 86I: 332 ac. 86J: 700 ac.	Within 5-10 years	SWS: D,C,B,J,I,G,H,E,F,A

Table 5-3: Aquatic Projects						
Number	***Project***	***Location***	***Purpose***	***Acres/Miles***	***Time Frame***	***Priority (Hi to Low)***
P-4	RHCA Thinning	SWS 86A-J	Thin overstocked and suppressed RHCAs in all SWS to acclerate development of recruitment of LWD materials.	86A: 364 ac. 86B: 817 ac. 86C: 484 ac. 86D: 807 ac. 86E: 333 ac. 86F: 755 ac. 86G: 501 ac. 86H: 1,174 ac. 86I: 570 ac. 86J: 775 ac.	Within 5-10 years	SWS: A,I,F,E,H,J,G,C,B,D
P-5	Stream Channel LWD Additions	SWS 86C, E, G	Increase LWD in Pickle Creek (86E), McIntyre Creek (86C), and Bear Creek (86G) to enhance instream structure.	Pickle Creek – 1.2 miles McIntyre Creek – 2.9 miles Bear Creek – 5.5 miles	Within 5-10 years	SWS: C, E, G 1. McIntyre 2. Pickle 3. Bear
P-6	Road Obliteration	SWS 86A-J *for specific roads refer to the Roads Analysis Section	Reduce overall road densities and roads within RHCAs. Restore SWS to total road density PFC by road obliteration.	86A: 12.4 mi. 86B: 24 mi. 86C: 24 mi. 86D: 24 mi. 86E: 7 mi. 86F: 24 mi. 86G: 24 mi. 86H: 24 mi. 86I: 24 mi. 86J: 24 mi.	Within 5-10 years	SWS: B,D,F,J,I,G,H,C,A,E
P-7	Meadow Creek Large Pool Development	SWS 86A & H	Create large pools to improve habitat conditions for threatened summer steelhead.		By 2004	High
P-8	McCoy Creek Large Pool Development	SWS 86C & D	Create large pools to improve habitat conditions for threatened summer steelhead.		By 2004	High

Table 5-4: Aquatic Projects						
Number	***Project***	***Location***	***Purpose***	***Acres/Miles***	***Time Frame***	***Priority (Hi to Low)***
P-10	McIntyre Road Channel Reconstruction and Rehabilitation	McIntyre Creek SWS 86C	Increase fish habitat, reduce sediment, restore floodplain and stream channel, restore native vegetation.		By 2004	High
P-11	Culvert Replacement	Dk Canyon(86B) Waucup (86J) E Brnt Corral • Rd 2440040 • Rd 2440120 Meadow (86J) Peet (86H) Unknown (86D) McIntyre (86C) • Rd2100 MP20 Battle (86A) L.Dk Canyon (86B)	Restore fish passage throughout watershed for all fish species and life stages.		w/in 5 yr 2002-4 2002-4 w/in 5 yr w/in 5 yr w/in 5 yr w/in 5 yr w/in 5 yr w/in 5 yr	Low High High High Low Low High Low Low
P-12	Drainage Culvert Installation	All Subwatersheds	Reduce sediment input to 303(d) listed streams containing federally listed fish.		Within next 5-10 years	Moderate - High

THE HUMAN DIMENSION

RECREATION and ROADS ANALYSIS

Table 5-5: Human Dimension – Recreation

Number	*Project*	*Location*	*Purpose*	*Acres*	*Time Frame*	*Priority*
H-1	OHV Management Plan	All Subwatersheds	Provide for appropriate OHV management within the watershed that meets recreation needs while protecting resources.		Within 5 years	High
H-2	Access and Travel Management Plan	All Subwatersheds *Refer to specific Roads Analysis recommendations below	Establish a long term management system for access and travel across the watershed ensuring all access needs are met while resources.		Within 5 years	High

Meadow Creek Watershed (86)
Roads Analysis
Management Recommendations

Subwatershed 86A

Right-of-way needs to be obtained for road 2120750 and 2120755. This will allow for re-contouring road 2120750 from about 2120756 to State Highway 244 and clean up of an old rock pit being used as a dump in sub watershed 86F.

Road Management Recommendations

1. Road 5100035 is isolated. The roads south end tied into the old Fly Creek Road which was abandoned in the '70's, stream crossings removed in the '80's, and wing ripped in the '90's. A log stringer bridge once crossed the Grande Ronde River at the forest boundary tying the Fly Creek Road and road 5100035 to road 5100. It was removed in the late '60's. After checking with the Union County Road Department, it was determined that access from the north is over a private road which ties into the McIntyre County Road near the old town site of Starkey.
2. Recommend re-contouring road 5100035.
3. Re-contour road 5156880.
4. Road 5156820. Check and refurbish drainage structures. This road was originally planned for a CFR closure but proved too isolated for effective administration.
5. Check 2120950 for possible re-contouring.
6. Road 2120 from Hwy 244 to 2105 and road 2120731 is being dust abated annually and should be considered maintenance level 4, which includes dust abatement.

Subwatershed 86B

Roads 2100390 and 2100410 parallel both sides of Dark Canyon Creek. These are basically contour roads located well above the creek. It is tempting to consider them for road obliteration because they appear close together on a map and obliteration would reduce road densities. Fire and future logging access needs to be looked at closely before one or both of these roads are re-contoured. Decommissioning by removing existing culverts, adding large water bars, many barricades, wing ripping, and seeding would stop traffic and minimize erosion. Road 2100410 is located for long reach logging systems. If the road is re-contoured, a new one will be built in the same location.

Road Management Recommendations

1. Decommission road 2100425 by scattering boulders and slash over the existing wheel tracks and ripping where it will do some good.
2. Treat 2100427 and 2100428 the same as 2100425.
3. Re-contour road 2100536 from the forest boundary to where it breaks out of the draw or approximately 0.60 miles.
4. Roads 2135090, 2135100 and 2100102 appear to have accessed harvested lodge pole stands. If so, these roads could be decommissioned until the next generation of lodge pole is ready to harvest. At a minimum they should be closed.
5. Decommission road 2135530 from 2135532 to 2135. Use road 2135700 from 2135530 to 2135 as access, when needed, to the remaining portion of 2135530. Renumber 2135530 and 2135700 from 2135530 to 2135400.
6. Decommission road 2135700 from end of decommissioned section to 2135530.
7. Decommission road 2135702.
8. Close road 2135709.
9. Decommission roads 2100372, 373 and 374.
10. Road 2100380 is a good candidate for obliteration. It parallels a large branch of Dark Canyon Creek and is located just across the draw from 2135. Changing logging systems and broken ground may allow the tributary area to be logged from 2135 and landings stubbed in

from 2100500 thus eliminating a long road adjacent to the stream. This would need to be check out before the road was re-contoured. Re-contour 2100381 at the same time.

11. Close road 2100385 from 2100391 to end.
12. Decommission road 2100391.
13. Decommission road 2100393 from 2100385 to 2100394. Construct logging access when needed from 2100355 to the present junction of 2100393 and 2100394.
14. Close road 2100355. Road was closed but is shown open on Transportation Map dated 10/03/01.
15. Close roads 2100347 and 349. Road located on flat terrain and if they were used to access lodge pole stands, decommission.
16. Decommission road 2100343.
17. Decommission road 2100607 and 608. These roads are presently closed and grassed in.
18. Close road 2138390
19. Close road 2138395.
20. Decommission last 0.40 miles of 2138420.
21. Close road 2138422 and 426
22. Close road 2138400 from saddle in section 14 to forest boundary. Barriers will be required at the forest boundary to prevent access from private property. Additional barriers will be required to prevent cross-country access from open roads.
23. Close road 2138415.

Sub watershed 86C

Potential road work on National Forest lands is limited at the present time because most roads are on private property or in the Intensive Management Area of the Starkey Experimental Forest.

Road Management Recommendations

1. Decommissioning of road 2137is to be completed FY 2002. Road 2100325 was wing ripped several years ago and should be inspected for additional needed work.
2. Decommission 2137380 from 2137 to where relocation of 2137380 starts.
3. Decommission 2137385 from 2137 to where relocation of 2137385 starts.
4. Decommission 0.30 mile of 2125350 from the west side of the draw to road 2125. This will help keep the upper gate from being vandalized and left open.
5. Decommissioning of road 2137378 from 2137379 to 2137 completed.
6. Close road 2100305 and 306.
7. Close road 2100307.
8. Decommission road 2125323 and re-contour old rock pit.
9. A Share Cost Agreement has been requested by Dick Snow on roads 2125354 and 2125350 from 2125354 to newly reconstructed County Road 1. This request was made and agreed to during right-of-way discussions between Dick Snow, Shauna Mosgrove, and the Forest Service.
10. Road 2125356 is shown open on the Meadow Creek Transportation Update map dated 10/03/01. It should be closed from a couple of hundred feet west of the allotment fence north to 2125350.
11. Check 2120436 in the field to verify location, length, etc.

Construction/Reconstruction Needs

With obliteration of road 2137 planned, some construction type work will be necessary to funnel traffic away from road 2137 and the McIntyre Creek draw bottom to roads presently located on ridges above McIntyre Creek.

1. Construct approximately 0.30 mile connection from 2137380 to 2137385. Construction starts approximately 1000 feet south of 2137 and 2137380 junction traversing north and climbing to junction with 2137385. This will be a one way junction with limited access to the south. Tag line and survey completed in FY 2000.
2. Construct approximately 0.55 mile connection from 2137385 to 2100335 (2138000). Construction starts approximately 1200 feet south of 2137 and 2137385 junction and

traverses north and east to junction with 2100335(2138000). Tag line and survey completed in FY 2000.
3. Construct connection from north termini of road 2137378 to road 2100.
4. Junction of roads 2125365 and 2125 is a one way junction towards 2137. Reconstruction will be required to allow traffic flow towards County Road 1.

Subwatershed 86D

Road Management Recommendations

1. Close road 2115245.
2. Re-contour 2123111.
3. Re-contour road 2123128.
4. Re-contour last 0.30 miles of road 2123129.
5. Re-contour road 2123131.
6. Several draw bottom roads grown in with reproduction were wing ripped and heavily grass seeded. They were constructed on the flood plain and little opportunity existed for re-contouring. Further disturbance is not recommended. These are roads 2125350 from 2125361 to its northern termini, 2125359, 2125234, 2125236, 2125250 and 2125265.
7. Road 2125361 is a wheel track road traversing the nose of a rocky ridge. It was barricaded, ripped, water barred and grass seeded but if someone wants to drive along this route from 2125 to the creek they will. Check and refurbish drainage.
8. Re-contour roads 2125120, 2125230, and 2125142.
9. Decommission road 2120237.
10. Decommission road 2120238.
11. Close road 2120230 from 2120100 to 2120212.
12. Decommission road 2120190 approximately 0.20 miles starting at 2120195 and running south.
13. Decommission road 2120192.
14. Decommission road 2120195.
15. Close road 5427220.
16. Re-contour 5427235 from 5427236 to end.
17. Re-contour road 5427314.
18. Close road 5427320 from 5427361 to end.
19. Close road 5427364 from 5427367 to end.
20. Road 2100 from east boundary of section 36, T.2 S., R.34 E., to beginning of existing crushed road just south of junction 2100 and 2123125 should be changed from maintenance level 2 to maintenance level 3 to provide a maintainable running surface, reduce surface runoff, and provide travel continuity.

Construction/Reconstruction Needs

Areas of concerns are roads located adjacent to McCoy Creek or its tributaries. Road 2100 from 2100275 to 2100230 and 2125 from 2100 to 2125140 as well as other sections of 2125 fit these criteria. Road 2100 has a weighted average grade of 6.25% with pitches of 9 and 10%. The first 1.44 miles of 2125 is constructed on the edge of the McCoy Creek flood plain with a weighted average grade of 3% and short pitches of 6 and 7%. Both road 2100 and 2125 are not surfaced allowing sub grade erosion and heavy summer dusting to enter the stream.

Road 2125 was constructed in the early 1960's as the main road serving forest service resource needs in an area defined by McIntyre Creek on the east, McCoy Creek on the west, private land on the south, and Umatilla Indian Reservation on the north. Road 2100 is the main route for any produces hauled from the area to Pilot Rock.

Relocation of 2100 from the McCoy Creek Bridge to approximately road 2100275 and re-contouring abandoned sections is one alternative. Right-of-way is needed for this alternative and normally requires two years to obtain. Performing deferred maintenance, installing additional drainage and surfacing road 2125 is another alternative. Costs for the two alternatives are similar

so the questions will be is there money available and what alternative will give the biggest environmental improvement for the dollars spent.

A brief analysis containing route maps, descriptions, and rough costs was submitted in FY 2000.

1. Recommend road 2125 receive a minimum of 4" lift of course graded crushed rock from road 21 to 2125140.
2. Recommend road 21 be surfaced from the McCoy Creek to the beginning of the crushed rock to the west.
3. Recommend building the relocation of road 21 as proposed and re-contouring abandoned portions of 2100. Surface 21 from 2100275 to county road.
4. Work with Union County on improving the running surface of road 21(also Union County Road 1) from the east section line of section 36 to the county line.

Subwatershed 86E

Road Management Recommendations

1. Re-contour 5156880.
2. Re-contour 2442150. First priority is from 2442 to 2442153.
3. Monitor conditions on 2442153 and determine additional work if any. This is a ridge road probably getting traffic even with the effort that went into closing it.
4. Re-contour 2442 from 2442150 to 2444310.
5. Check roads 2442172, 2442250, and 2442300 for resource damage. These roads were closed and seeded in the mid '70's and have had no traffic. At last inspection they were grown in with grass and brush.
6. Road 2442069 has been closed for many years and grown in with brush and grass. There are areas that could be re-contoured if the road is not to be used again.

Subwatershed 86F

Road Management Recommendations

1. Roads 2442020, 2442030, 2442035, and 2442040 were wing ripped but should be re-contoured.
2. Re-contour road 2440600.
3. Re-contour road 2440605.
4. Re-contour last 0.51 mile of 5160900. This is a mid slope road located above Sullivan Gulch. If logging is restricted below the road, it could be re-contoured but road 5160950 and its tributary area would be left without access. If access can be found for 5160950, re-contour 5160900.
5. A fence was built in 2444060. Re-contour portions without the fence.
6. Re-contour 2444072.
7. Re-contour 2444200.
8. Re-contour 2444367.
9. Road 5160930 was closed. This is a ridge top road with considerable hunting pressure. Additional closure effort may be needed.
10. Roads 2442 and 2444 have been the primary access into the Marley Creek and Burnt Corral Creek area for almost 50 years. All major roads tributary to these two collector roads have been closed, wing ripped, and now recommended for re-contouring. These are roads like 2442020, 030, 069, 150, 250, 300, and half of 2442 itself. The 2444 system has roads like 2444040, 060, 070 and others being planned for re-contouring. Remaining open roads in this area are tributary to 5155 and 5160. Re-contour 2442 from Hwy 244 to 2442060. Re-contour 2444 from Hwy 244 to 2444070

Construction/Reconstruction Needs

1. Add surfacing and drainage to road 2444 from 5155 to 2444070.
2. Reconstruct 2442070 to a minimum standard with surfacing, turnouts and adequate drainage.

Subwatershed 86G

Construction/Reconstruction Needs

Some ditching and additional drainage structures are needed on road 2105 and other roads on the Starkey Experimental Forest. Sections of 2105 that do not have crushed rock, should be rocked. A separate construction and road management plan should be developed with the scientist providing input about their concerns and needs.

Subwatershed 86H

Only the area within this sub watershed west of road 21 is being considered for additional road management at this time because everything east of road 21 is inside the elk study area.

Road Management Recommendations

1. Close road 2100110. Road can be accessed across country from road 21. Install several barricades along 2100110's length to prevent wheel track roads access being developed from road 21.
2. Re-contour road 2100130.
3. Re-contour road 2100131.
4. Re-contour road 2100132.
5. Re-contour road 2100137.
6. Re- contour road 2100145.
7. Re-contour road 2110659.

Construction/Reconstruction Needs

1. Construct tie spur from end of 2100153 to 2100139 if ever needed for vegetation management.

Subwatershed 86I

Road Management Recommendations

1. Re-contour road 2100145.
2. Re-contour road 2100150 from 2100152 to end.
3. Re-contour road 2114137. This road runs straight up and down the slope and offers open access to roads in the 2114135 system and therefore a large portion of the Waucup Creek drainage. Road 2114135 is closed by a gate that receives considerable vandalism. Because of administrative access needs, road 2114135 and its tributary roads have received little closure effort other than the one gate. Recommend additional closure effort on 2114135 and tributaries. If closure of 2114137 is breached, there will be no place to go.
4. Re-contour 2114135 from 2114160 to end.
5. Barricade 2114135 north of 2114160 junction and also north of 2114150 junction.
6. Re-contour road 2114138.
7. If possible, re-contour 2114265.
8. Re contour road 2114145.
9. Re-contour road 2110710 starting 0.35 mile from section 36 and running to section 36.
10. Roads like 2110013, 230, 232, 236, 250 ,260, 2114451, 551, and 559 are flat land roads shown on the Transportation Update map as obliterated that were built to access lodge pole stands . These should be checked for obliteration success and additional effort applied if necessary.
11. Re-contour road 2110360.
12. Re-contour road 2110362.
13. Obliterate road 2110040.
14. Obliterate road 2110041.
15. Obliterate road 2110012.

Construction/Reconstruction Needs

1. Construct tie through spur from 2110804 to 2110240 when needed for vegetation management.

2. Recommendation is to reconstruct 2114 for 2.53 miles from 2114380 to 2110220, relocate and reconstruct 2110220 to 2110 for approximately 2.00 miles. This would be a low standard road similar to 2110 - 14' sub grade, 1000' turnout spacing, course graded crushed rock, (pit run if found) and drainage as necessary.

3. Reconstruct 0.17 miles of road 2110 from 2110360 to 2110359 adding ditch and culverts. Short term high volume runoff area above the road causing heavy road surface riling into an annual stream.

Sub Watershed 86J

Road Management Recommendations

1. Re-contour last 0.30 miles of road 2114175.
2. Re-contour road 2114280 from 2114283 to end.
3. Re-contour road 2114283.
4. Re-contour road 2114286.
5. Re-contour last 0.40 miles of 5427091.
6. Re-contour last 0.36 miles of 5427093.
7. Close road 2115245.

(If the elk fence is ever removed, recommend road 2120 from ½ miles west of 2120100 to Meadow Creek be re-contoured and remove the Upper Meadow Creek Bridge.)

Construction/Reconstruction Needs

1. Improving the 2100 crossing of Waucup Creek already has a project proposal. Part of that proposal should include ditching and installing culverts from 2115200 to Meadow Creek. Considerable surfacing from this section of road is washed on to the flood plain of Meadow Creek.
2. The road inventory for road 2115 indicates there are "ford dip" in intermittent streams that are washing - some badly. Recommend an inventory be made of the culvert/ford dip situation and ford dips be replaced with culverts where needed.
3. Reconstruct portions of road 2114 within this watershed to a minimum rocked standard.

THE BIOLOGICAL DIMENSION

Table 5-6: Biological Dimension – Diversity, Old Growth, I&D

Number	*Project*	*Location*	*Purpose*	*Acres*	*Time Frame*	*Priority*
B-1	Identify and Manage Old Growth Patches	Patches enclose allocated and existing old growth; approximately one patch per subwatershed (usually no more than 2 miles apart)	Maintain existing and manage for future old growth habitat; identify potential old growth habitat patches, generally larger than 400 acres. (smaller stands of old growth will exist outside the larger patches to meet HRV)	1000-6000 acres/SWS	100 years	High
B-2	Identify and Manage Connective Corridors	See B-1	Provide connective corridors to facilitate wildlife movement between old growth patches.		Ongoing	Moderate
B-3	Identify and Manage Big Game Cover Areas	Intermediate stand treatments will accelerate the development of cover of biophysical groups 1-4 (see B10-B12)	Provide cover to influence the distribution of elk across available habitat.	See B10-12	Ongoing	Moderate
B-4	OHV Management	Refer to Tri-Forest OHV Plan	Enhance wildlife security habitat	Watershed 86	5 years	High
B-5	Road obliteration	All Subwatersheds *Refer to specific roads in the Road Analysis section above.	Return un-needed road beds to productivity, and reduce motorized disturbance to wildlife	See specific roads in Roads Analysis Section	5 years	High

Table 5-7: Biological Dimension – Diversity, Old Growth, I&D						
Number	***Project***	***Location***	***Purpose***	***Acres***	***Time Frame***	***Priority***
B-6	Sign Old Growth Areas	Little Dark Canyon McCoy Pickle Frog Heaven Waucup 2,3 McClellan 1,2 Meadow Ck, 1,2, 3	Post signs to protect snags and old growth values from wood cutting.	12 MA 15 areas	5 years	Low
B-7	Reduce fuel loadings in Allocated Old Growth Areas	Little Dark Canyon McCoy Pickle Frog Heaven	Reduce the risk of wildfire in allocated SSLT old growth areas with high fuel loadings.	547 ac 324 ac 208 ac 121 ac	10 years	Moderate
B-8	Forage Enhancement Burning	All subwatersheds	Burn grassland and dry plant communities to enhance forage and grass cover for big game and nesting birds.	14,096 ac (biophysical group G6-9) nonforested =23,980 ac TOTAL=62,056	10% per year by sws	Moderate

Table 5-8: Biological Dimension – Diversity, Old Growth, I&D						
Number	***Project***	***Location***	***Purpose***	***Acres***	***Time Frame***	***Priority***
B-9	Reduce stocking levels in overstocked stands	86A: 2,240 ac. 86B: 4,680 ac. 86C: 3,215 ac. 86D: 4,885 ac. 86E: 2,340 ac. 86F: 4,500 ac. 86G: 3,815 ac. 86H: 6,460 ac. 86I: 3,700 ac. 86J: 3,660 ac.	Thinning to reduce densities in overstocked stands to promote stand growth and vigor.	39,490ac	32% per decade	High Silv-1
B-10	Promote development of LOS	All Subwatersheds	Thin from below to increase growth to facilitate development of late and old structure (LOS) across the landscape to meet HRVs.	24,900ac (included in 39,490 total above)	50% of U.R. per decade (12,460ac)	High Silv-2
B-11	Remove Insect and Disease Damaged Trees	All Subwatersheds	Remove insect or diseased trees in severely damaged stands at or below recommended stocking levels.	Estimated to be 20% of the total acres listed above	2,492 acres of the total 12,460 acres.	Moderate Silv-3
B-12	Precommercial Thinning	All Subwatersheds	Thinning of stem exclusion closed canopy stands to promote vigor and growth.	17,000 ac	Within next 20 yrs.	Moderate Silv-4
B-13	Stocking and Plantation Protection	All Subwatersheds	Ensure disturbed areas are adequately stocked and plantations are protected.	2,640 acres currently	Within next 5 years	Low Silv-5

THE BIOLOGICAL DIMENSION

Table 5-9: Biological Dimension – Fire & Fuels

Number	*Project*	*Location*	*Purpose*	*Acres*	*Time Frame*	*Priority*
B-14	Reduction of High Fire Risks	86C: 1,040 ac. 86H: 2,832 ac. 86J: 2,102 ac	Reduce fuel loadings using mechanical and prescribed fire in areas identified as having a high fire risk.	90-100% of these acres will receive a mechanical pretreat. Burning will be limited to 10% of the available forage/ year within the watershed.	Within 10 years on a rotation basis	High Fire-1 Hi to Lo= 86J, H, C
B-15	Reduction of Moderate Fire Risks	86A: 940 ac. 86B: 2.250 ac. 86C: 5,840 ac. 86D: 2,800 ac. 86E: 1,015 ac. 86F: 2,520 ac. 86G: 1,405 ac. 86H: 10,755 ac. 86I: 2,045 ac. 86J: 5,760 ac.	Reduce fuel loadings using mechanical and prescribed fire in areas identified as having a moderate fire risk.	15% of these acres will receive a mechanical pretreat. Burning will be limited to 10% of the available forage/ year within the watershed.	Within 10 years on a rotation basis	High Fire-2 Hi to Lo= 86J,H,C,F,D, I,B,E,A,G

Table 5-10: Biological Dimension – Fire & Fuels						
Number	***Project***	***Location***	***Purpose***	***Acres***	***Time Frame***	***Priority***
B-16	Reduction of Low Fire Risks	86A: 3,735 ac. 86B: 7,670 ac. 86C: 95 ac. 86D: 7,835 ac. 86E: 3,695 ac. 86F: 6,155 ac. 86G: 6,185 ac. 86H: 65 ac. 86I: 5,990 ac. 86J: 70 ac.	Reduce fuel loadings using mechanical and prescribed fire in areas identified as having a low fire risk.	15% of these acres will receive a mechanical pretreat. Burning will be limited to 10% of the available forage/ year within the watershed.	Within 10 years on a rotation basis	Low Fire-4 Hi to Lo= 86J,H,C,F,D, I,B,E,A,G
B-17	Reintroduction of Fire in High Departure Areas	86A: 1,355 ac. 86B: 2,210 ac. 86C: 1,825 ac. 86D: 1,980 ac. 86E: 1,060 ac. 86F: 1,995 ac. 86G: 2,630 ac. 86H: 3,350 ac. 86I: 516 ac. 86J: 865 ac.	Return fire to areas in Fire Regimes 1 and 3 (hot/warm dry sites) to restore fire as a disturbance, reduce fuel loadings, and manage for historic species mixes and structures.	15% of these acres will receive a mechanical pretreat. Burning will be limited to 10% of the available forage/ year within the watershed.	Within 10 years on a rotation basis	High Fire-3 Hi to Lo= 86H,G,B,D,F C,A,E,J,I
B-18	Reintroduction of Fire in Moderate Departure Areas	86B: 390 ac. 86C: 190 ac. 86D: 95 ac. 86F: 50 ac.. 86H: 140 ac. 86I: 35 ac. 86J: 10 ac.	Return fire to areas in Fire Regime 4 (cool/moist sites) to restore fire as a disturbance, reduce fuel loadings, and manage for historic species mixes and structures.	15% of these acres will receive a mechanical pretreat. Burning will be limited to 10% of the available forage/ year within the watershed.	Within 10 years on a rotation basis	Low Fire-5 Hi to Lo= 86H,G,B,D,F C,A,E,J,I

THE BIOLOGICAL DIMENSION

RANGE and NOXIOUS WEEDS

Table 5-11: Biological Dimension – Range & Noxious Weeds

Number	*Project*	*Location*	*Purpose*	*Acres*	*Time Frame*	*Priority*
B-19	Treatment of Leafy Spurge, Musk Thistle, Diffuse Knapweed, White Top Noxious Weed Sites	1. T4S, R34E, S13 2. T4S, R34E, S12 3. T4S, R35E, S7 4. T4S, R34E, S11-12 5. T4S, R35E, S8,17-18 6. T2S, R35E, S14 7. T3S, R35E,S14 8. T3S, R36E, S13 9. T3S, R35E, S14 10. T3S, R35E, S9 11. T2S, R34E, S34 12. T3S, R34E, S2-4 13. T3S, R34E, S7-8 14. T3S, R35E, S7 15. T4S, R34E, S19 16. T4S, R34E, S19 17. T3S, R34E, S35 18. T3S, R33.5E, S24 19. T3S, R33.5E, S24 20. T3S, R33E, S14	Appropriately treat populations of the identified noxious weed species to eventually eradicate these species from this area.	1. .25 2. .25 3. .10 4. 3 5. 1 6. 0 7. .25 8. .25 9. .10 10. .10 11. .25 12. .10 13. .50 14. .10 15. .10 16. 0 17. .10 18. 2 19. .10 20. .10	Within a 5 year period (2006)	High
B-20	Treatment of Canada Thistle and Bull Thistle	T3S, R33E T4S, R35E, S20 T4-5S, R35E, S36,1 T4S, R33.5E, S19 T3S, R33E, S12 T3S, R33E, S12	Appropriately treat populations of the identified noxious weed species to eventually eradicate these species from this area.	1. 1 2. .50 3. 2 4. 2 5. .50 6. .50	Within a 5 year period (2006)	Moderate

Table 5-12: Biological Dimension – Range & Noxious Weeds						
Number	***Project***	***Location***	***Purpose***	***Acres***	***Time Frame***	***Priority***
B-21	Monitoring of Tansy Ragwort Sites	T5S, R35E, S6 T3S, R34E, S34	These areas were treated previously. Annual effectivenes monitoring is needed to ensure treatment success and minimize potential for regrowth.		Yearly for 5 years	Low
B-22	Bear Creek/Little Bear Creek LWM Placement	SWS 86G Starkey Allotment	Placement of large woody material along stock trails and riparian areas to protect streambanks and increase riparian complexity.	Bear Creek = 4mi. L.Bear Crk= 2mi.	Within 5 years (2007)	Moderate
B-23	Bear Creek/Little Bear Creek Off-site Water Development	SWS 86G Starkey Allotment	Develop additional off-site water sites to provide for better livestock distribution and utilization.	Bear Creek = 4mi. L.Bear Crk= 2mi.	Within 5 years (2007)	Moderate
B-24	Campbell Creek Riparian Exclosure and Water Development	SWS 86A Starkey Allotment	Reconstruct Campbell Creek riparian exclosure and redevelop the Campbell water development to better protect the stream.	¾ mile Campbell Creek	Within 5 years (2007)	Moderate
B-25	Upper Dark Canyon LWM Placement	SWS 86B Dark Ensign Allotment	Development of stock trails, placement of LWM, construct additional off-site water developments, change salting locations to better manage livestock use.	1.5 miles of Dark Canyon Creek	Within 5 years (2007)	Moderate

Table 5-13: Biological Dimension – Range & Noxious Weeds						
Number	***Project***	***Location***	***Purpose***	***Acres***	***Time Frame***	***Priority***
B-26	Antler Springs LWM Placement	SWS 86B Dark Ensign Allotment	Placement of additional LWM and repositioning of existing LWM to prevent livestock from trailing adjacent to the stream.	½ Mile	Within 5 years (2007)	Moderate
B-27	E. Fk. Burnt Corral Spring Development	SWS 86F Tin Trough Allotment	Placement of LWM, construct additional off-site water developments to better manage livestock use.	½ Mile	Within 5 years (2007)	Moderate

Table 5-14:						
Number	***Project***	***Location***	***Purpose***	***Acres***	***Time Frame***	***Priority***